SCH. RENA A. PERCY BACK AGAIN YESTERDAY AFTERNOON WITH FAIR CATCH.

Sch. Rena A. Percy, Capt. John Stream, arrived yesterday from a quick halibut trip being only "two weeks out with 8000 pounds of fresh halfbut, 9000 pounds of salt fish and 8000 pounds of fresh fish.

When it comes to quick trips and good stocks, Capt. Stream appears to be there most every time. This is the fourth trip in the craft, since pur-chasing her and he is certainly making

Other arrivals are schs. Fallon, down from Boston with 35,000 pounds of fresh fish and sch. Mary E. Silveira which arrived from there this forenoon.

The gill netters brought in about 40,000 pounds, most of the steamers having small catches.

# Today's Arrivals and Receipts.

The arrivals and receipts in detail

Sch. John J. Fallon, via Boston, 35,\_

000 lbs. fresh fish.
Sch. Rena A. Percy, Georges, hali-buting, 8000 lbs. halibut, 9000 lbs. sait cod, 8000 lbs. fresh fish.

Steamer Ibsen, gill netting, 2300 lbs. fresh fish.

Steamer Alice, gill netting, 1800 lbs.

Steamer Quoddy, gill netting, 10,000 lbs. fresh fish.

Steamer Eagle, gill netting, 1600 lbs.

Steamer Naomi Bruce, gill netting, 2000 lbs. fresh fish. Steamer Mindora, gill netting, 1500

fresh fish.

Steamer Rough Rider, gill netting, 1200 lbs, frseh fish. Steamer Margaret D., gill netting,

3500 lbs. fresh fish, Steamer Prince Olaf, gill netting,

1500 lbs. fresh fish

Steamer Enterprise, gill netting, 4000

lbs. fresh fish. Steamer Bethulia, gill netting, 4000 lbs. fresh fish.

Steamer Venture, gill netting, 3000

Steamer Hope, gill netting, 1500 lbs.

fresh fish. Steamer Roamer, gill netting, 800 lbs.

fresh fish. Sch. Mary E. Silveira, via Boston.

Steamer Jeffery, shore. Steamer Water Witch, shore.

Steamer R. J. Kellick, pollock sein-

ng, 4000 lbs. fresh pollock. Steamer Trident, pollock seining. 4000 lbs. fresh pollock.

# Vessels Sailed.

Sch. Conqueror, Cape North, shacking.
Sch. Victor, south seining.
Sch. Veda M. McKown, south sein-

Sch. Pinta, south seining.

Sch. Valentinna, pollock seining. Sch. Dorcas, pollock seining.

Sch. Georgia, pollock seining.

Sch. Gleaner, New York. Sch. Eugenia, hallbuting. Sch. John J. Fallon, Boston.

# TODAY'S FISH MARKET.

# Salt Fish.

Trawl bank cod, large, \$3.75, medi-

ums, \$3.25; snappers, \$2.25. Handline Georges codfish, large,

cwt.; medium, \$3.75; snappers, \$2.50.

Eastern halibut codfish, large, \$3.87 1-2; mediums, \$3.50; snappers,

\$2.50.
Georges hallbut codfish, large \$4.12 1-2; mediums, \$3.50.
Haddock, \$1.50.
Pollock, \$1.50.

Cusk, large, \$2.50, medium, \$2, snaprers. \$1.50. Hake, \$1.50.

# Fresh Fish.

Haddock, 70 cents per cwt. Peak cod, large, \$1.75; medium,

Western cod, large, \$2; mediums, \$1.65; snappers, 75 cents.
All codfish not gilled, 10 cts. per

100 pounds less than the above.

Hake, 90 cts. Cusk, large, \$1.40; medium, \$1.10,

snappers, 60 cts.

Dressed pollock, 80c.; round, 70c.

Bank halibut, 10c. per lb. for white and 7 1-2 cents for gray.

May 1.

The market appears to be entirely cleaned up, says the Fishing Gazette, There were only from 3000 to 4000 barrels packed last year-not enough to supply the demand which forced consumers to draw upon the stock of for-eign mackerel. The catch also fell off considerably which stiffened prices.

The Gloucester catch was largely bought up by local arms and sold to family trade. Very little doing in fereign and the stock on hand is drawn upon by consumers of the domestic.

Advices from Dingle April 13, states that there were about 14,000 taken there, of these about 10,000 were cured, the remainder being sent to fresh fish

The cured mackerel is expected to count about 430 to the barrel.

The quantity and value of mackerel landed on the Irish coasts for the menth of March was four barrels, valued at \$20; for the same month in 1911, 93 barrels.

# To Command Shelburne Fleet.

Ross Locke of Jordan Bay, will command the fleet of fishing steamers to be built by the recently incorporated Roseway Fish Co. of Shelburne. The company is receiving much encouragement, and prospects are good for a live concern that should mean much for the development of the fishing industry in that district.

While the concern is capitalized at \$20,000, it is to be co-operative so far as possible. That is why the shares are placed at \$10. The first vessel will be launched about the last of June. and another in the early fall. The first call for \$5 will be made for the building of the first vessel and the remainder called for in time for the building of the second vessel.

# The Irish Fishing Fleet.

There were 5652 vessels actually engaged in sea fisheries in 1910, in Ireland, compared with 5976 in 1909. Twelve of these were steam trawlers, of which eight were 20 to 71 tons net register and the others smaller. The total number of motor boats in use at the end of the season was 36, of which eight were 25 tons. The demand for large fishing vessels has been unable to keep pace with it, and more first-class boats have been built in the last two years for East Coasts ports than during the previous 15. With one ex-ception, all have had motors installed.

May 1.

# The Biggest Porgy Boat.

The largest steam craft ever constructed for the menhaden fishery has been launched recently, at Rockland, Me., and has been named the William B. Murray. She will hail from Green. port, N. Y.

She has a capacity of 6000 barrels of fish, one-quarter more than the capacity of any other menhaden steamer in American waters The Murray has a gross tonnage of about 400 and a net tonnage of about

The principal dimensions are: Length of keel, 169 feet; beam, 24.1 feet; depth of hold, 13 feet. The hull is constructed of oak, planked and ceiled with Ore-

The steamer will carry a crew of 35, hut has accommodations for 55 men. Capt. M. J. Marran of Patchogue, L. I., steamer of that name, will command the Murray. The craft was christened Miss Therese White.

The steamer's machinery will be installed at Portland. Two steamers, which are duplicates of the Murray are on the stocks and will be pushed to completion, impetus having been given the industry by the appearance on the Maine coast last season for the first time in many years of immense schools of menhaden.

# Fish Generally High There.

In Omaha, Neb., the home of the beef and pork packing industries, for the first time in years fresh fish are selling cheaper than fresh meats. Beef steaks, pork chops and other cuts are nearly 50 per cent. higher than 30 days ago. Fish are selling at from 12 1-2 to 20 cents per pound, while steaks are worth from 15 to 25

May 1.

Fish Have to Learn to Swim.

Director William E. Meehan, of the Philadelphia, Pa., Aquarium, says fish are not born swimming but have to acquire the art. To prove this point, he took as an example a number of baby trout. Hundreds of these youngsters were just learning to swim at the time. Their efforts to keep their noses towards the inflow pipe and off the bottom of the tank were very amusing. Within a week he declared the entire 15,000 or 18,000 would be fullfledged swimmers.

# A Fish Story.

At Jacksonville, Fla., the other day a kingfish weighing 23 pounds jumped out of the water opposite the P. & O. dock, hit the building just below the roof and landed on the dock. It was captured by the watchman, says the "Times Union."

# Steamer Nomad Gone Home.

Steamer Nomad has abandoned the gill netting fishery until the fall and returned to her home port at Stonington, Conn.

# may 2.

# Lobsters Are Down.

Lobsters are really within reach of the average person just now, though there is no chance that they will ever be as low as they once were. Still the price has declined, and this too on both the live and the boiled varieties. The influx of the Nova Scotia lobsters has been the cause of whatever drop has taken place. They are arriving by the hundreds of thousands in Boston, and some of the Maine dealers have received shipments which have been placed in the pounds where they will be kept for the time being. But actual lobster arrivals in Portland have been few and far between lately. Boston has held the center of the market and a good part of the big buying has been with the Boston dealers.

# Pensacola Arrivals,

Few arrivals were noted last week at Pensacola. For the Warren Fish Co., the Clara P. Sewall landed 18,000 of red snappers and 4000 pounds groupers. The Oriola had 12,-000 pounds red snappers and 26,000 pounds of fresh mackerel. For the E. E. Saunders Co., the Favorite landed 17,000 pounds red snappers, 5000 pounds groupers; the Albert Geiser, 16,000 pounds red snappers and 4000 pounds groupers; the John M. Keen had 22,000 pounds red snappers; the Flora J. Sears had 25,000 pounds red snappers; 10,000 pounds groupers; the Dorothy had 19,000 pounds red snappers, 10,000 pounds groupers and 5000 pounds mackerel.

# First of Flitchers.

Sch. Maxine Elliott, the first of the flitched halibuters to get away, sailed this forenoon.

May 2.

It may now safely be said that the pollock have really struck in. Tues-day the Portland steamer Elthier was Boothbay with 20,000 pound fish. This is the biggest single trip yet taken on the Maine coast, but it is no more than Capt. Reed deserves. He has been looking for the pollock for a month along with other captains, but later than usual they have just struck in. Other netters and seiners may now be expected to land some good fares. About the only sizeable trip of fish

landed at Portland Tuesday among the shore fishermen was the James & Esther of the Cape Perpoise fleet. She

had 20,000 pounds.

Another halibut fare was landed Tuesday at Portland by sch. Yakima of this port, which has been fishing for several weeks on the banks. She brought in 15,000 pounds of halibut, which were sold to Capt. Harty of the New England Fish Co., at 5½c and 8 cents, and had in addition about 20,000 pounds of shack fish which she brought here.

May 2.

YAKIMA BROUGHT HER FRESH AND SALT FISH TO THIS PORT.

Fish receipts here this morning consist of two Georges handliners, one from Boston and one from Portland.

Sch. Pauline arrived this forenoon from a handlining trip pounds of salt cod and 5000 pounds of

Down from Boston is sch. Belbina P. Domingoes with about 40,000 weight of fresh fish left over, which will go to the splitters.

Sch. Marsala came in yesterday from a Georges handlining trip with 22,000 lbs. salt cod and 1800 lbs. halibut. Sch. Yakima is the other fare bringing over 10,000 pounds of fresh fish and 10,000 pounds of salt fish from Portland, after disposing of her halibut fare at the latter place.

About 30,000 pounds of fresh fish landed by the gill netters, the largest fare being that of steamer Geisha, which came in yesterday after being two days out with 10,000 pounds of fresh fish.

# Today's Arrivals and Receipts.

The arrivals and receipts in detail

are: Sch. Marsala, Georges handlining 22,000 lbs, salt cod, 1800 lbs. halibut, Sch. Yakima, via Portland, 10,000 lbs. fresh fish, 10,000 lbs. salt fish.

Str. Ibsen, gill netting, 2000 lbs. fresh Str. Alice, gill netting, 1000 lbs. fresh

Str. Eagle, gill netting, 1000 lbs. fresh fish.

Str. Naomi Bruce, gill netting, 2000 lbs. fresh fish. Str. Mindora, gill netting, 1400 lbs.

fresh fish. Str. Rough Rider, gill netting, 2500 lbs. fresh fish.

Str. Margaret D., gill netting, 4500 lbs. fresh fish. Str. Prince Olaf, gill netting, 1500

lbs. fresh fish. Str. Enterprise, gill netting, 2000 lbs.

fresh fish. Str. Venture, gill netting, 1000 lbs.

fresh fish. Str. Hope, gill netting, 1300 lbs. fresh fish

Str. Geisha, gill netting, 10,000 lbs. fresh fish. Str. Roamer, gill netting, 400 lbs. fresh fish.

Sch. Pauline, Georges, handlining, 20,000 lbs. salt cod, 5000 lbs. fresh halibut.

Sch. Belbina P. Domingoes, via Boston, 40,000 lbs. fresh fish. Sch. Mary E. Silveria, via Boston.

Sch. Flora J. Sears, shore. Sch. Annie and Jennie, shore.

Sch. Rita A. Viator, shore.

# Vessels Sailed.

Sch. Monitor, hallbuting. Sch. Elsie, hallbuting. Sch. Maxine Elliott, flitching.

Sch. Mildred Robinson, Cape North, shacking Sch. Electric Flash, south seining.

Sch. Aloha, south seining. Sch. Evelyn M. Thompson, pollock

Steamer Philomena, pollock seining.

Sch. John J. Fallon, Boston. Sch. Walter P. Goulart, haddocking.

# TODAY'S FISH MARKET.

# Salt Fish.

Trawl bank god, large, \$3.75, mediums, \$3.25; snappers, \$2.25. Handline Georges codfish, large,

\$4.37 1-2 per cwt.; medium, \$3.75; snappers, \$2.50. Eastern halibut codfish, large, \$3.87 1-2; mediums, \$3.50; snappers,

\$2.50.

Georges halibut codfish, \$4.12 1-2; mediums, \$3.50. Haddock, \$1.50.

Pollock, \$1.50. Cusk, large, \$2.50, medium, \$2, snappers, \$1.50.

## Hake, \$1.50. Fresh Fish.

Haddock, 70 cents per cwt. Peak cod, large, \$1.75; medium,

\*\*1.55; snappers, 75c.

Western cod, large, \$2; mediums, \$1.65; snappers, 75 cents.

All codfish not gilled, 10 cts. per

100 pounds less than the above. Hake, 90 cts. Hake, 90 cts.

Cusk, large, \$1.40; medium, \$1.10, snappers, 60 cts.

Dressed pollock, 20c.; round, 70c.

Bank hallbut, 9c per lb. for white and 6 1-2c for gray.

# FISHING BANKS DUE TO ICEBERGS ancient shore line. If the depth to grounds are inexhaustible, ologic evidence having to

# Formed by Glacial Deposits Borne Dow From the North.

# Beam Trawler Destroys Not Onl Fish But Bottom Growth.

public interest in the natural forces Cape Breton and Newfoundland coasts that act, and have long acted upon terminating in the greatest of all, the life and navigation says Charles Carroll Curtis in an article in the Boston Transcript recently.

aster to the greatest ship was truly an worn from the lands and deposited in appalling result of the constant descent of ice into the North Atlantic. But the menace these forces hold out to shipping is but the smallest measure of their power. Few people know how remarkably the whole configuration of our northeastern shore-line has been altered by these forces, steadily working through considerable stretches of geologic time. There is evidence to show, for instance, that Boston was at one time 200 miles inland. But at one time 200 miles inland. destruction has not been the sole effect of this process. They have taken life; but they have also given it. It is probable that we owe to these agelong ice movements the remarkable string of "banks" that reach at intervals from Newfoundland to Cape Cod, and still, the graveyard of many ship, but invaluable now for the fishing which so intimately depends upon them. Their danger element vanished for general navigation so soon charting led to their avoidance. They estill witness many a disaster to fish-ermen, but in the main the danger is no longer in what may happen from

them as in what may happen to them. With the hope of collecting some specimens which might throw light on the origin and formation of these offshore fishing banks, I recently left Boston on board of a schooner bound for Georges Shoals. From the plentiful collection of rocks and specimens drawn up from the sea bottom on the gear of our fishermen, the character and origin of the deposits seemed to be clearly demonstrated. The geologic

conclusions have so direct a bearing on the present and urgent agitation regarding the vital subject of the conservation of the supply of our common food fishes, that it has been deemed worth while briefly to state them.

# Formation of a "Fish Farm".

Georges Banks is a shoal of the open sea lying in the ocean 150 miles east by south from Boston. The depth of this main shoal, which is roughly 70 miles square in extent, averages from 15 to 30 fathoms, though in the middle portion there are spots with so little as 14 feet of water over them, where in storms the seas mount "mountains high." The most dangerous area is carefully avoided by all vessels. Between the shoals and the mainland there are depths of over a hundred fathoms, nearly 900 feet being found in spots, while on the eastern side the water falls off rapidly from the 50 fathoms to the 100, 500 and 1000 fathoms line of true ocean depths.

On the south between the lands of Cod and the shoals of Nantucket is what mariners call "the channel" with depths from 50 to 100 fathoms, while to the north of Georges is another trough where the soundings average considerably over 100 fathoms or 600 feet. On the north side of this "deep" lies a shoal ground of similar depth and character as Georges, but about a third of its area. known as Brown's Bank, some 60 miles off Cape Sable, Nova Scotia, from which it is separated by a deep gully.

There are various other banks or Recent events at sea have sharp ned off-shore shoals along the Nova Scotia, Grand Banks of Newfoundland.

All these banks lie upon the com-paratively shallow marine margin bor; dering our Atlantic coast, known as the continental shelf, which is usually Mr. Curtis goes on to say: The dis- assumed to be composed of the waste

> the sea along the shore margin of its basin. It has been held by scientists, indeed, that the greater width of this Atlantic shelf when compared to the narrow bordering coastal rim in the same latitude on the Pacific side of the continent, has been gained through laying down of a vast amount of Zetritus, the remains of lofty mountains whose roots alone now exist upon our north Atlantic coast. Be this as it may, another factor seems to have played a very important part in his upbuilding of the continental borer, and appears to be the chief agent n the origination of the shoaler parts which constitute our most important shing grounds

## Made by Ancient Icebergs.

The material collected from the botom of Georges and Browns Shoals ears the stamp of glacial There is a variety similar to that found in glacial deposits on the The pebbles, boulders and which constitute the bottom are characteristically glacier worn rather than water worn as would result were these Banks essentially of littoral or marine origin. The rocks are largely subangular, of great variety of formation and mineral content.

There are two lines of deposits which mark the southernmost limits of the great ice sheet, which long ago occupied the northern portion of the continent in Pleistocene times. The moraine, where the materials brought by the glacier, sand, gravel and boulders, etc., were left, can be readily traced. It has been recognized on the Atlantic border of the southeast coast of Massachusetts, having largely built up the moranial islands of Nantucket and Martha's Vineyard, whose gently south sloping plains represent the sands washed out from the old retreating ice-front, and whose rough and hummocky backbone, the irregular surface produced under the moving ice margin. This terminal moraine continues westward appearing again in "No Man's Land" and Block Island, and forming the "keel" of Long Island, from whence it is traced through Staten Island, northern New Jersey, southern Pennsylvania, through Ohio to the junction of the Ohio and Mississippi, sweeping westward into Kansas, and then northward through Nebraska and

The islands south of New England do not constitute the original limit of the glacial deposits, for the ocean has been eating away the land during thousands of years and the sea of thousands of years and the sea of may at no distant day have to alter our calm belief that these fishing undoubtedly indicates their former extent. Exactly how far south the actual above-water land surface originally stood is not yet determined. It seems that the present twenty fathoms curve is a very conservative estimate for the

which the old channel of the Hudson River can now be traced in the coastal shelf, be taken as evidence there is ground for holding that in the rega of New York the land once reached over one hundred miles further to sea, during which time Boston's site probably lay twice that distance inland.

## Boston 200 Miles Inland.

We have conclusive evidence that movements of the land along this portion of the Atlantic coast, both of elevation and depression, have taken place in the past and are even going on at present. Old shore lines where the changes of level of 160 to 300 feet are distinctly shown occur on the islands and shores of the coast Maine. Professor Shaler stated his view that evidence of a change of level of over a thousand feet was to be found at Mt. Desert and detailed studies of mine for the past two seasons, covering the Maine, Nova Scotia, Cape Breton and Newfoundland coasts, have borne out this view.

At the time when the land stood at the very moderate higher elevation of twenty fathems, depths corresponding to the inner harbor soundings might have been found ten miles farther east of Boston's wharves. Cape Cod would have extended but 'five miles farther to the eastward and the land about Nantucket thirty miles seaward.

Georges Shoal under such conditions would appear as an island over one hundred feet above the sea, resembling Nantucket and Martha's Vineyard, though of twice the size of their com-The evidence is that such was a former configuration of the eoast in this vicinity, and that there at a little over one hundred miles off the shore an island half the size of Ireland.

## A True Atalantis.

This was a true Atalantis and pos-sibly the "Atalantis" of fame and fa-ble. The conclusions are that the fishing banks off our coasts are of glacial origin. That they lie on the continental shelf within the glaciated zone, north of the outer terminal moraine, and that their extent is therefore re-

stricted within a comparatively small area, and it is useless to seek new banks south of this line. This limited extent emphasizes the necessity for the conservation of the wealth of piscatorial life on the banks which have in the past proved veritable banks of wealth to our population.

Georges Shoals are regarded by fish-ermen as one of the richest fish grounds in the world, and the Georges cod, which are here found in great size and abundance, are said to be the finest caught. The shoal water, and the strong Bay of Fundy tide and frequency of gales make these banks exceedingly rough and the record of disaster here is long.

Only a few vessels, known as "Georgiamen," ancient hulks with crews of

old fishermen aboard who use the hand line from deck, now anchor on Georges, so dangers of collisions from parting cables has been greatly lessened. The modern fishing schooner with her yacht-like design rides out the hardest gales, either under her foresail or with a triangular riding sail set in place of the mainsail. She "jogges it out," that is with one small sail set and trimmed flat down she is left with no one at the wheel to ride out the gale in the wind's eye. This she usually accomplishes in a remarkably seaworthy way, while all hands keep below, leaving the ves-sen to take what comes to this "fisherman's harbor."

# Sub-Soil of the Fish Farm.

How the fish are caught today is too old a story for re-telling, but new considerations as to fishing over the "banks" are arising and demanding serious attention. It is clear that we

ologic evidence begins to point that way. On a recent visit to Brown's Bank, filled with incident characteristic of these cruises, I observed that the catch was good in fine large haddock Some cusk and ugly looking catfish with long feline teeth and dragon-like heads were brought in, also a few halibut, one of 100 pounds, pollock and A comprehensive collection codfish. of rocks hauled up with the marine growths attached was gathered here. There were long stemmed, stone lillies, erinolds, which the fishermen called "lemons," soft sea slugs or holothurians they called "pumkins," a yellow growth termed "corm," sponges and a large variety of other marine life. The rocks were of similar character to rocks were of similar character to those of Georges though seemingly of greater seety, somewhat smooth and rounded, but subangular quartz quartizite predominated both in sand and pebbles. Slates, granites, diorites, schists, sandstones similar to the variety usually found in glacial deposits on the neighboring shore were abundant, testifying to the glacial origin of these sea banks.

The formation of these fishing banks

indicates that it will be fruitless to look for new ones south of the glacial limit or about latitude 40 deg., and soundings on the Continental shelf north of this parallel are now com-plete enough to assure us that no new banks of any considerable extent will be discovered. The need of wealth which unlike our mineral resources is self perpetuating if properly conserved, more firmly impresses itself when it is thus seen how limited is the distribution of these specially adapted formations. They are far enough from shore to prevent the smothering by fine sediments of the multitudinous marine life, which here finds a pebbly bottom, cleaned by strong tides, on which it can attach itself. It is a most prolific sort of feeding ground for the great schools of our best food fishes which have here their habitat.

# Protection Necessary for the Banks.

It seems desirable that some action should be taken to protect the fish during the spawning season, at least for a period of years. There is also the greater danger that the destructive method of fishing with the beam trawler may earse irreparable and permanent damage to those natural

The damage of this method is unsuspectedly deep-seated. It has to do with the very geologic arrangement of the sea bed. The beam travler tows over the bottom a great open net which scours the ground and engulfs nearly everything big and little with which it comes in contact. Not only does it the disturb and destroy growths of the bottom, but vast quantities of small and unmarketable fish are crowded into the great open maw and either smothered or killed when dumped on deck. It also picks up, without discrimination, the sick and spawning fish which will not bite the

The beam trawler is operated by 'steamboat sailors" off the street, and controlled by interests who need never

# More Conservation.

To judge the urgent need of conservating fishing on this Continent, for the fishing banks are an essential part of the shallow coastal she'f, we have but to glance at the present situation in Europe, where this destructive fish. ing has put an end to the earlier methods. Numbers of small English fishing towns have been obliged to give up the fish business. Among seventy Billingsgate dealers recently, only one had fish of market size, these consisting of three boxes of Iceland cod and haddock. The European consumers are obliged to eat skate, ling, catfish and other "culch" which Americans do

Shall we allow this last remaining source of natural food supply to go the way of the buffalo, and carrier pigeon, or the semi-extinct lobster and clam, to result in the same sort of prohibitive prices that we pay today for the crustaceans, for lack of foresight? Nature has so arranged limited areas off our coast that they are veritable mines of self-perpetuating wealth and inexpensive food for the people. Shall we sell this heritage, open-eyed to the overseas disaster already wrought.

# WHEN AND HOW ICEBERGS ARE BORN

# Break From Great Ice Fields and Float With Current.

Next to fog, icebergs are regarded of 15 knots, and her collision bulkhead the source of gravest peril to vesas the source of gravest peril to vessels navigating the North Atlantic, says the New York Times. According to all accounts brought by incoming ocean steamers this menace has been greater during the last few weeks than any recent year. The presence of a great number of icebergs in the lane of transatlantic traffic just now does not, however, necessarily indicate any extraordinary conditions in the Arctic during the past winter.

According to the most reliable estimate of scientists it requires as a rule from three to four years for an iceberg to drift across the polar basin, and reach that region of the Atlantic in which the disaster overtook the White Star giantess on her maiden voyage.

Among recent disasters caused by icebergs was the collision between the Anchor liner Columbia and huge berg in August last year. The Columbia had an ugly hole stove in her bow, but was able to reach port under her own steam. In August, 1899, the Donald-son liner Concordia, a cattle steamer, outward bound from Montreal, collid-ed with a berg in the Belle Isle straits off the Newfoundland coast and had her bow crushed. To go further back, there was the disaster to the old Guion line steamship Arizona on November 7, 1879. She crashed into a berg off the Newfoundland banks and immediately began to sink at the bow. her 300 passengers and crew and destruction-withstood the shock and no lives were lost

## Great Precaution Taken.

The greatest precautions are taken on board the big ocean liners to guard against collision with icebergs. Not only are the officers on the bridge and the lookout in the crow's nest impressed with the fact that they must exercise the greatest vigilance when vessels approach the Newfoundland banks, where the danger from icebergs is the greatest at this time of the year, but the temperature of the water is taken frequently, and any striking drop indicated by the thermometer is certain to be accepted as a warning against the presence of icebergs in the vicinity.

This, and the lowering of the temperature of the air-if one should happen to pass to the leeward of an iceberg-are about the most reliable of all danger signals set against this peril. To the eye, indeed, an iceberg is not easily perceptible at night even though the weather should happen to be clear and the moon, perchance, shining. Most of the icebergs have an intense white and bluish hue, which blends with moonlight in a fashion that may confound the most seasoned and vigilant of mariners.

Had the course of the Titanic car-

ried her about 100 miles to the southward of where the disastrous crash occured she would in all probability have steered clear of all dangers from According to the most expert But she was steaming only at the rate mariners, an iceberg is rarely seen at

this time of the year-or at any season, indeed—further south than 40 degrees, north latitude. The Titanic's wireless operator gave the position of the steamship when the collision came as 41 degrees 46 minutes north, or 106 miles to the north of the southern boundary of the Atlantic region, where the danger from icebergs is an ever-present one.

# Information Sent Out.

The hydrographic office of the navy department from time to time has sent out much detailed and reliable information regarding the formation and travels of the icebergs and ice fields in the north Atlantic.

Until within comparatively recent period it had been presumed that the icebergs that infested the Atlantic during the spring and early summer months had broken off from the border of the great Arctic ice fields. This, according to the light of later research, is an erroneous theory. iceberg that drifted directly in the path of the Titanic, it is almost certain, was a small fragment of a huge glacier that years ago had disengaged itself from the interior ice cap of western Greenland, sliding with irresistible and devastating momentum toward the coast, and finally plunging into the deep sea.

It is when the edge of such a huge glacier reaches a steep coast that from time to time fragments are broken off by their own weight, caught up by the ocean currents and carried off.

The size of these fragments varies greatly, but according to the reports of the hydrographic office an iceberg, from 60 to 100 feet to the top of its walls, with pinnacles and spires reaching from 200 to 250 feet in height. are not unusual in the Arctic sea.
These measurements apply only to
the mass of ice above the surface of the water. It would be futile to seek to render an estimate of the depth of an iceberg below the surface of the sea because this depth varies with water. A few years ago an iceberg which had a pinnacle of about 100 feet in height did not ground until it reached 16 fathoms of water in the Belle Isle straits, near St. John's N. F.

Thousands of such fragments drop off every year. As they reach the water they are caught up by the polar currents. Nansen, during his expedition with the Fram Amundsen, during the Arctic trip he undertook in 1901, and the duke of the Abruzzi in 1905 made a study of polar sea physics. The course of the currents is abreast her forerigging a pretty well known from the published aft, just above her keel. result of their observations.

Along the northern part of the west Greenland coast, where most of the icebergs are created, there is current setting off shore and toward the pole. This current carries the icebergs some distance northward, until a junction is made with what is known as the Labrador current. This sets in a due southerly direction along the coast of

Baffins Land and Labrador. While at times it ceases entirely and while its speed varies greatly, being greatest near the coast after winds from the northward, it has been estimated by scientists that usually an iceberg is carried south by this current at a rate of from 10 to 30 miles in 24 hours.

### Icebergs Sometimes Crushed.

It is not by any means smooth sailing. All along the Labrador coast are rugged promontories and numberless islands and cliffs surrounded by reefs and shallow water. Some of the ice-bergs are crushed against the rockbound coast, others are caught in the deep flords of Greenland before they reach the open sea at all. Others again ground in the shallow waters along portions of the coast, until only a small percentage of a year's output of icebergs ever reaches far enough south to bring misfortune to transat-lantic shipping.

According to the records issued by the hydrographic office at Washington, the ice in such bergs is of extraordinary brittleness. There is authentic information showing that a blow with an ax, the concussion of a gunshot, the heavy blast of a steam ship whistle has had the effect of splitting a huge mountain of drifting ice. They are more readily broken in warm weather. On the coast of Lab. rador, during the short summer that prevails there, is a constant and almost deafening crash as icebergs collapse in collision with the coast or

with other bergs. They assume the greatest variety of shapes from those approximating to some regular geometric figure to others crowned with spires, domes, minarets and peaks, while others still are pierced by deep indentions or caves," says the report of the hydro-graphic office. "Small cataracts pre-cipitate themselves from the large hergs, while from many icicles hang in clusters from every projecting ledge. They frequently have outlying the weight of that part which is above spurs under water which are as dangerous as any other sunken reefs. For this reason it is advisable for vessels to give them a wide berth, for there are a number of cases on record where vessels were seriously damaged by striking when apparently clear of the

> "Among these is that of the British steamship Nessmore, which ran into a berg in latitude 41 degrees 50 minutes north, in longitude 52 degrees west, and stove in her bows. On docking her a long score was found extending from abreast her forerigging all of the way Four frames were broken and the plates were almost cut through. The ship evidently struck a projecting spur after her helm had been put over, as there was clear water between her and the berg

berg.

after the first collision.
"It is generally best for vessels to go to windward of them because the disintegrated fragments will have a tendency to drift to leeward, while

open water will be found to windward. Serious injury has occurred to vessels through the breaking up or capsizing of icebergs. Often the bergs are so nicely balanced that the slightest melting of their surfaces causes a shifting of the center of gravity and a consequent turning over of the mass into a new position, and this overturning also frequently takes place when bergs, drifting with the current in a state of delicate equili-brium, touch the ocean bottom."

TEN ARRIVALS, INCLUDING FOUR OF THE SHORE FLEET, HAVE AVERAGE FARES.

T wharf dealers were fully supplied this morning with fresh fish, 10 arriv-als, including four of the off-shore fleet being in with average fares.
Sch. Belbina P. Domingoes took out

part of her fare yesterday afternoon and sailed for Gloucester with the re-

mainder this morning.

Trade was not very brisk, although fair prices were quoted on all grades

of shore fish.

Haddock sold at \$3, large cod \$2.25, market cod \$1.50, hake \$1.50 and pollock, 90 cents to \$1.

## Boston Arrivals.

The fares and prices in detail are: Sch. Belbina P. Domingoes, 20,000 haddock, 12,000 cod, 5000 hake, 10,000 cusk, 1500 halibut.

Sch. Lucy B. Windsor, 2200 cod. Sch. Helen B. Thomas, 5000 haddock, 10,000 cod, 15,000 hake, 15,000 cusk. Steamer Ripple, 34,000 haddock, 1500

cod, 1500 pollock, Sch. Eleanor DeCosta, 32,000 had-

dock, 6000 cod. Sch. Yankee, 4500 haddock, 3500 cod. Sch. George H. Lubee, 2000 haddock, 3200 cod, 25,000 hake. Sch. Viking, 500 haddock, 3000 cod,

6000 hake, 9000 cusk. Sch. Mina Swim, 9000 haddock, 13,000

Sch. Emily Sears, 31,000 cod.

Haddock, \$3 per cwt.; large cod, \$2.25; market cod, \$1.50; hake, \$1.50; pollock, 90 cts. to \$1

May 2.

# Whale Seen Off Portland,

Summer is a long way off at present, but a harbinger of warm weather has hit the Maine coast just the same.

He is a whale and he is having a grand time in the water off Portland harbor. The leviathan was seen for the first time Thursday morning not far from the lightship. He stayed near the surface of the water for half an hour or so and seemed to be having a great time. He jumped and dove and spouted and acted in just the way that whales are always supposed to act when they are having a good time.

With a whale off the coast, it is a pretty sure sign that there are her-ring around, says the Portland Press. Whales will always follow the herring, the fishermen say, and the big animal would not be prowling around the waters of Maine unless there happened to be something for him to eat in the immediate vicinity. With herring off the coast, the fishermen will get busy and land a few now.

The other day, large schools of the

fish were reported on Cashes, so that it is thought probable these are the same herring that were seen there. They are heading for the shoaler water and in a short time will be with-

in easy striking distance.
It is regarded as a little early for whales as yet, but now that one has put in appearance it may be safely concluded that more will follow. That means there will be warm weather, for the whales are usually the first of the summer visitors.

# Porto Rico Fish Notes.

Arivals of fishstuffs at the various ports of Porto Rico for the week ending April 16, according to the market letter of S. Ramirez & Co., were as follows: Codfish, 1106 trcs., 150 bxs.; pollock 228 trcs.; haddock, 83 trcs.; dry fish, 45 trcs., 8 drms., 40 bxs.; herring, 200 bdls.; bloaters, 398 bdls.; canned salmon, 100 bxs. There is very little change in the position of that fish market. Demand is fair and un-der pressure of liberal arrivals, the market shows a downward trend. It is hoped the lower prices may stimulate consumption. On usual net ex wharf basis they quote about as follows: Codfish, \$7 to \$7.13 per cwt.; pollock and haddock, \$4.00 to \$4.12 1-2 per cwt.

# Fishing Fleet Movements.

Sch. Elmer E. Gray arrived at Shelburne Monday last.

Sens Quennapowitt, Rebecca, Ethel B. Penney and Speculator arrived at Liverpool Monday last and cleared for

fishing. Sch. Tacoma and Mary F. Curtis arrived at Canso, Monday last and sch. Thomas S. Gorton sailed from there on that date.

# May 3.

STEAM TRAWLER SWELL HAS GOOD CATCH OF HADDOCK AT. T WHARF.

Eight arrivals of groundfish were reported at T wharf, Boston, this morning, since yesterday, but there was little or nothing doing in the line of trade, the market, as it generally is at the close of the week, being rather

The steam trawler Swell arrived yesterday afternoon with a big trip, her hail being for 85,000 weight of haddock and 4000 pounds of cod. Sch. with 41,000 Albert W Black is in pounds, mostly hake, while the re-mainder are shore crafts with small

Haddock sold at \$1.50 to \$2, large cod, \$2 to \$2.25, market cod, \$1.50 to \$1.65, hake, \$1.25 to \$2, pollock, \$1 and cusk, \$1.25.

## Boston Arrivals.

The fares and prices in detail are: Sch. Esther Gray, 5000 cod. Steamer Swell, 85,000 haddock, 4000

Sch. Wm. A. Morse, 12,000 haddock, 9000 cod. Sch. Albert W Black, 3000 haddock,

3000 cod, 35,000 hake, Sch. W. M. Goodspeed, 8000 haddock,

2000 cod. Sch. Edith Silveira, 6000 haddock

1000 cod. Sch. Eva Avina, 2300 cod.

Sch. Fitz A. Oakes, 2400 cod. Haddock, \$1.50 to \$2 per cwt.; large

cod \$2 to \$2.25; market cod, \$1.50 \$1.65; hake, \$1.25 to \$2; pollock, \$1, eusk, \$1.25.

## Portland Fish Notes.

Schooner Katie L. Palmer arrived at Portland Wednesday with 7000 pounds of pollock taken off Boon Island and several other fishing boats were in with small amounts, caught off the lightship. The Palmer reports seeing numerous small schools of pollock off Boon island, but the fish were very wild and would disappear as soon as the boats came in their vicinity. The fish off the lightship acted the same way, and the boats only secured a few barrels. Large sized herring were also running near the lightship yesterday and some 25 barrels were secured, the fish averaging about a pound and sell-ing readily to the dealers at \$2 per barrel. The fishermen are greatly encouraged over the fact that the herring are showing up well in toward shore, and quite a fleet of the smaller sized craft will go out in pursuit of them. The catch of sardine herrings thus far spring has been rather disappointing, there have been very few taken around here or at the eastward. Several of the Eastport factories, how-ever, have opened up and with settled weather better results are expected.

Another halibut fare was reported Wednesday, schooner Elk coming in from a fortnight's cruise on Georges Banks with 12,000 pounds of hallbut and the same amount of salt cod. Capt. Colson reports very rough weather on the banks.

# Gone on Maiden Trip.

The new sch. Imperator sailed on her maiden voyage this morning for a Cape North shacking trip, under command of Capt. Freeman Decker.

The new steamer Lois L. Corkum sailed on her maiden trip pollock seining, under command of Capt, William

# More Mackerel From Traps.

The traps and netters off Chincoteague are still finding a few fish, and 75 barrels were shipped to Fulton Market, New York yesterday from the Virginia coast. The mackerel are all large and were quoted at 35 cents apiece, wholesale, this morning,

# Alewives Still Plenty.

Sch. Hope baited at Edgartown, Wednesday and sailed for halibuting. The Times correspondent reports alewives still being taken in plenty by the

# Hauled Out of Gill Netting.

Steamer Venture, Capt. Patrick Mui phy, has abandoned the gill netting fishery for the season.

SEVERAL OF THE GILL NETTERS PUT ASHORE NETS AND TAKE ON SEINES.

Five of the fleet with part of their fares left over are here this morning from Boston, and were sold to the different firms to split.

They are schs. Rose Dorothea, 40,000 pounds; Francis V. Sylvia, 60,000 pounds; Viking, 20,000 pounds; Emily Sears, 25,000 pounds; Helen B. Thomas, 40,000 pounds.

Sch. William H. Moody is in from Georges handlining trip, with 25,000 pounds of salt cod and 2000 pounds of halibut.

The catch of the gill netters was less than 30,000 pounds yesterday. Several of the steamers have pulled out of the fishery, and others will follow to engage in pollock seining.

# Vessels Sailed.

Sch. Atalanta, flitched halibuting. Sch. Imperator, new, Cape North, shacking.

Sch. Romance, Cape North, shacking. Sch. Avalon, halibuting.

Sch. Hattie L. Trask, Georges, handlining.

Str. Lois H. Corkum, (new), pollock seining. Sch. Alice, Boston.

Sch. Terra Nova, Boston.

# Today's Arrivals and Receipts.

Sch Rose Dorothea, via Boston, 40,-000 lbs. fresh fish. Sch. Frances V. Sylvia, via Boston,

60,000 lbs. fresh fish.
Sch. W. H. Moody, Georges, 25,000 lbs. salt cod, 2000 lbs. fresh halibut.
Sch. Viking, via Boston, 20,000 lbs. fresh fish.

Sch. Emily Sears, via Boston, 25,000 lbs, fresh fish.

Sch. Elk, via Portland. Sch. Helen B. Thomas, via Boston, 40,-

000 lbs. fresh fish. Sch. Annie and Jennie, shore.

Sch. Rita A. Viator, shore. Steamer Alice, gill netting, 1200 lbs. fresh fish.

Steamer Eagle, gill netting, 1800 lbs. fresh fish.

Steamer Naomi Bruce, gill netting, 12,000 lbs. fresh fish.

Steamer Mindora, gill netting, 1000 lbs fresh fish.

Steamer Rough Rider, gill netting, 2000 lbs, fresh fish. Steamer Margaret D., gill netting,

3000 lbs. fresh fish. Steamer Prince Olaf, gill netting,

2000 lbs. fresh fish. Steamer Enterprise, gill netting, 3000 lbs. fresh fish.

Steamer Hope, gill netting, 2000 lbs. Steamer Sam and Priscilla, Prov-

incetown.

# TODAY'S FISH MARKET

# Salt Fish.

Trawl bank cod, large, \$3.75, medi-

ums, \$3.25; snappers, \$2.25. Handline Georges codfish, large, \$4.37 1-2 per cwt.; medium, \$3.75; snappers, \$2.50.

Eastern halibut codfish, large, \$3.87 1-2; mediums, \$3.50; snappers, \$2.50.

Georges halibut codfish, large \$4.12 1-2; mediums, \$3.50. Haddock, \$1.50.

Pollock, \$1.50.

Cusk, large, \$2.50, medium, \$2, snappers, \$1.50. Hake, \$1.50.

# Fresh Fish.

Haddock, 70 cents per cwt. Peak cod, large, \$1.75; medium,

\$1.55; snappers, 75c.

Western cod, large, \$2; mediums, \$1.65; snappers, 75 cents. All codfish not gilled, 10 cts. per

100 pounds less than the above.

Hake, 90 cts. Cusk, large, \$1.40; medium, \$1.10, snappers, 60 cts.

Dressed pollock, 80c.; round, 70c. Bank halibut, 9c per lb. for white and 6 1-2c for gray.

# may 3.

# Fishing Fleet Movements.

Schs. John Hays Hammond, Kineo, Olga and Corona passed Mulgrave Tuesday last, bound to Magdalenes. Sch. Mary F. Curtis arrived at Can-o Tuesday last bound to Magdalenes. Schs. Cynthia and Gossip sailed from Canso Tuesday.

# may 3.

Fitting Early for Swordfishing

While the swordfishing season is far from being near, the sch. Albert D. Willard has come to Portland from Mackerel Cove and will at once begin to fit for the most exciting of all branches of fishing in northern waters. The schooner has been fitted with a 24-horsepower engine in place of the-16 that she carried.

In a very short time there will be none of the regular fishermen at Portland. Practically all of them have fitted or are fitting for offshore fishing of some kind. The Willard is the first to get ready for swordfishing. Some of the others are south after mackerel, while the majority of the others are engaged or will be engaged in hallbuting. After that season is over the majority of them will go after swordish ter swordfish.

# May 4. FIRST NETTERS AT NEW YORK.

TRAPS DOWN CHATHAM WAY TOOK 13 LARGE MACKEREL YESTERDAY MORNING.

A despatch to the Times from Fulton Market, New York, states that 225 barrels of large looater mackerel are on the market this morning, 200 barrels having been shipped from Chincto-eague, Angle Sea and Atlantic City. The netters Wood and Mack and

Highland Bell, the first of the netting fleet to reach New York, arrived this morning with 600 and 554 fish, taken off Ocean City. A report was received at Fulton Market yesterday afternoon that sch. Monarch, Capt. John F. Vauter, had struck fish, but the craft had not arrived there this morning.

Southern netters struck a few mackerel Thursday off the Virginia coast. The boats in at Chincoteague were the Uncle Sam with 600 fish in count, the Belle with 200, the Guysuta with 100, the Leona, with 400, the Peita with 300 and the Charlotte with 600. At Washapreague 50 fish in count were landed, while Ocean City didn't get any. Altogether 75 barrels of mackerel reached New York yesterday morning, and the Boston market got 15 barrels.

Advices received in Boston this forenoon states that the fish were selling at 25 cents a piece, a drop from the price paid yesterday, which was 37 1-2

Trapmen down in Chatham, hauling their weirs, found a few stray mackerel mixed with the herring and flounders. Yestenday flounders. Yesterday morning T wharf dealers received 13 such mackerel. All were large.

# IS MAKING MONFY IN GOOD SCH. ELK.

Sch. Elk, Capt. Charles Colson is keeping in the front rank in the fresh halibut fishery, as is evidenced from the nice little stock that the craft has made in less than a month's fishing.

With two baitings, Capt. Colson has two trips at Portland in three weeks, and settled for a check of \$3843, the men's share being \$110 apiece clear.

# May 4.

# Sch. Raymah Sold.

Sch. Raymah, owned by the Atlantic Maritime company of Boston, has been sold to Tibbo & Son of Grand Bank, Newfoundland, thus adding another to several crafts which the concern has already purchased here. The craft was built in Essex in 1905 and is 140 tons gross and 95 tons net. Her new owners will use her in the ocean freighting of fish to Oporto and the Mediterranean.

# Fishing Fleet Movement.

Sch. Eugenia arrived at Edgartown Thursday for a baiting of alewives. Schs. Juno, Hazel R. Hines and

Theodore Roosevelt arrived at Canso Wednesday last, and cleared for fish-

# Herring Strike At Monomoy.

Herring have struck in at Monomoy and 400 barrels of large fish are reported taken by the traps there yesterday.